

**This Page Is Inserted by IFW Operations
and is not a part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- **BLACK BORDERS**
- **TEXT CUT OFF AT TOP, BOTTOM OR SIDES**
- **FADED TEXT**
- **ILLEGIBLE TEXT**
- **SKEWED/SLANTED IMAGES**
- **COLORED PHOTOS**
- **BLACK OR VERY BLACK AND WHITE DARK PHOTOS**
- **GRAY SCALE DOCUMENTS**

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

20/22E0" E5402660

Flourescence Signal

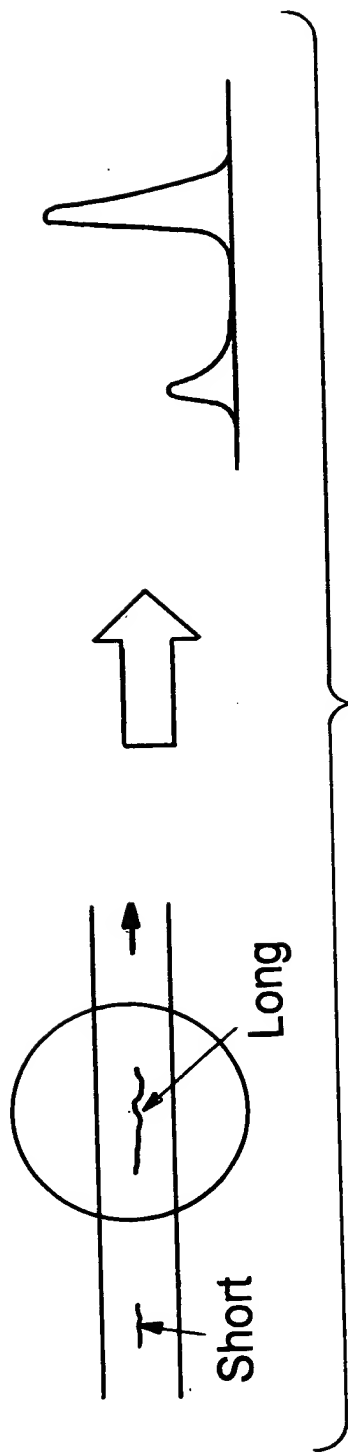


Fig. 1A

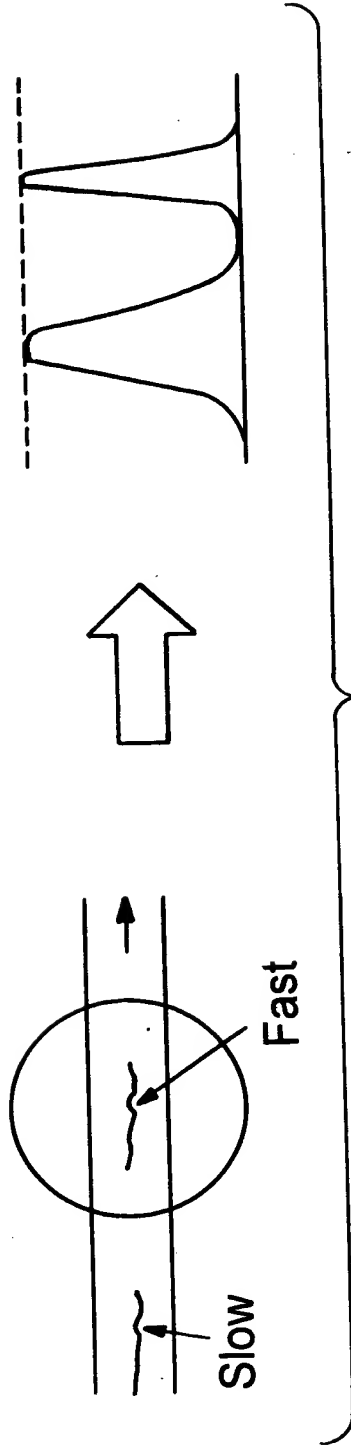


Fig. 1B



VIM - system

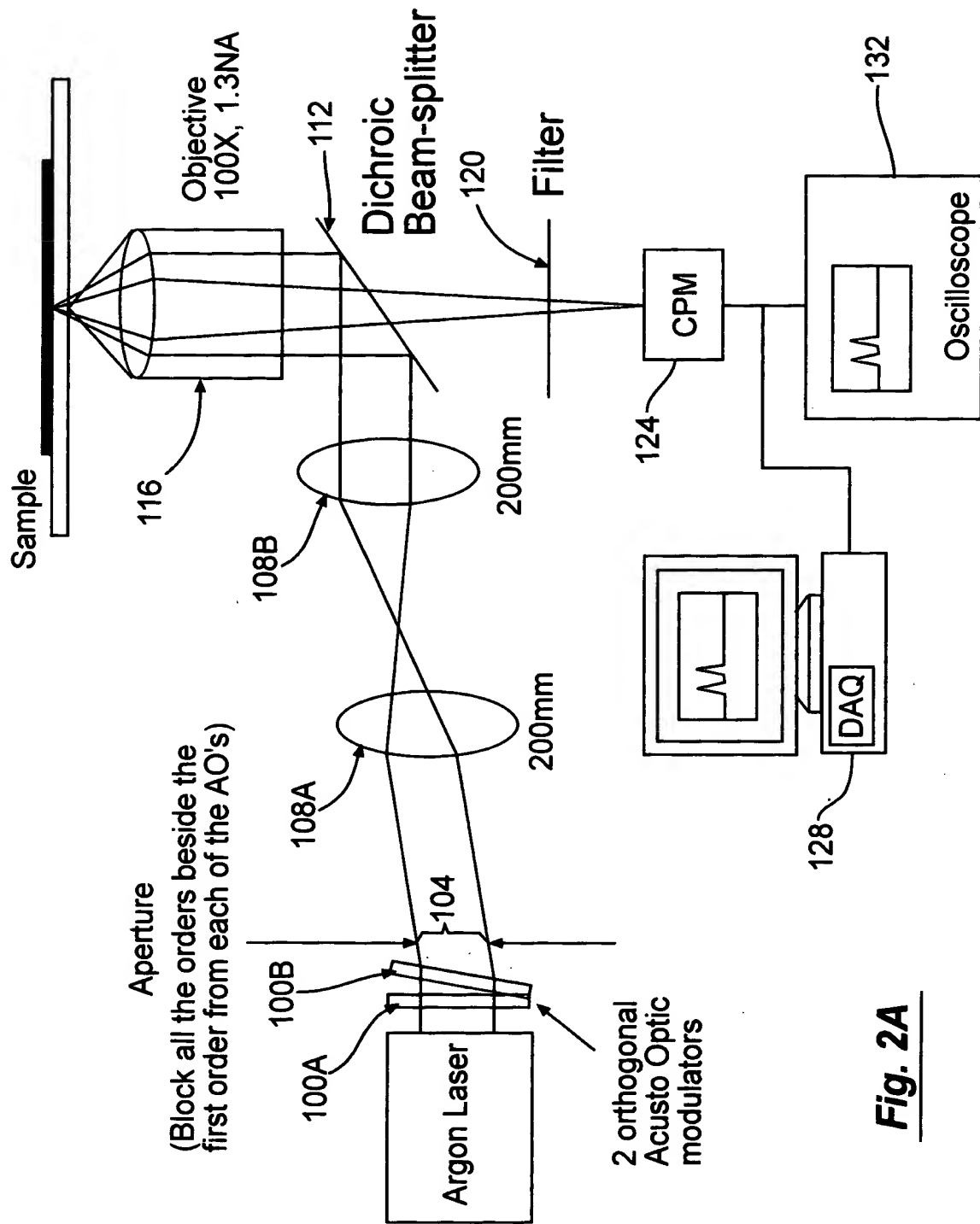


Fig. 2A

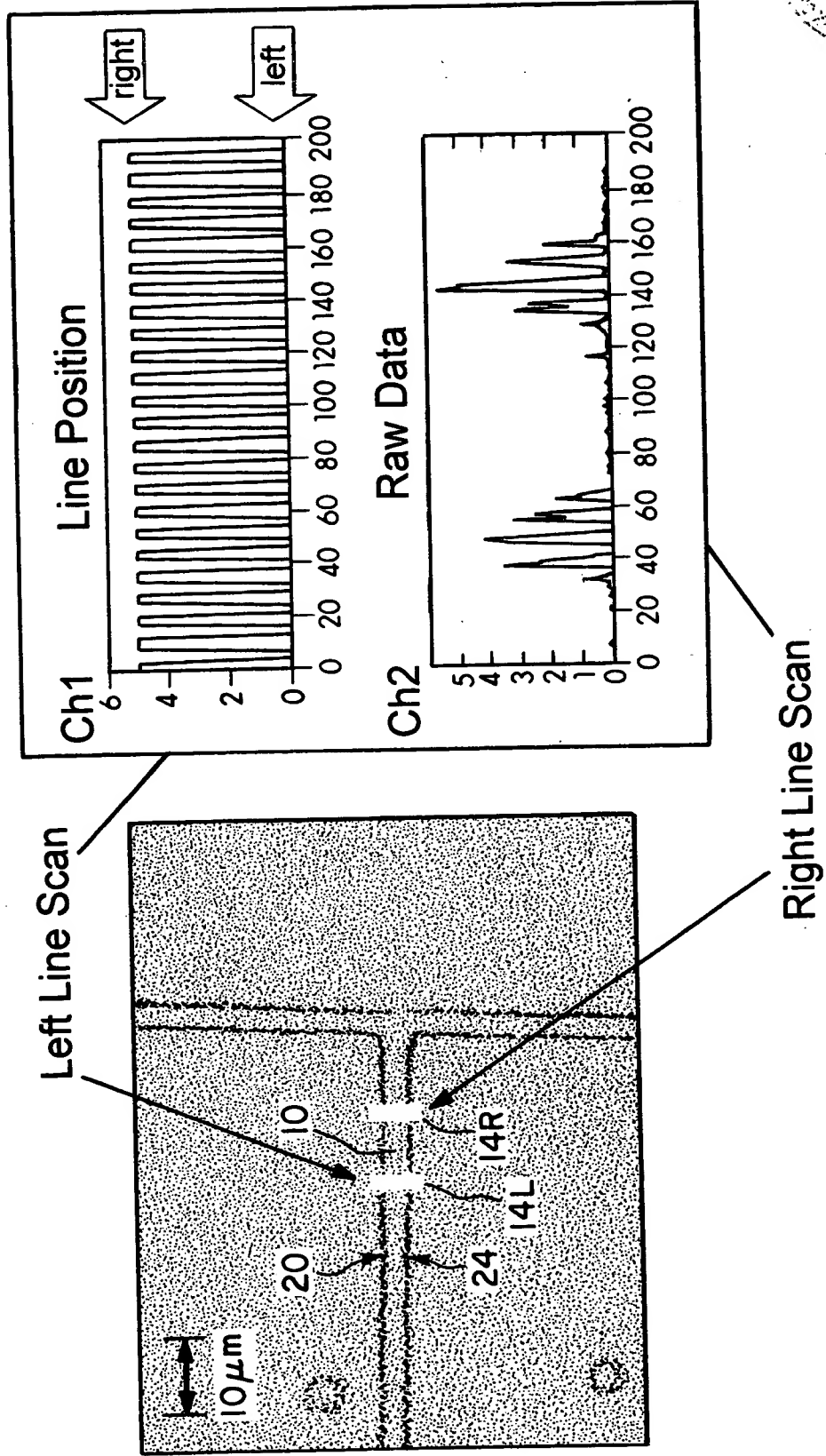


Fig. 2B



The beam after the two Acusto Optics Modulators

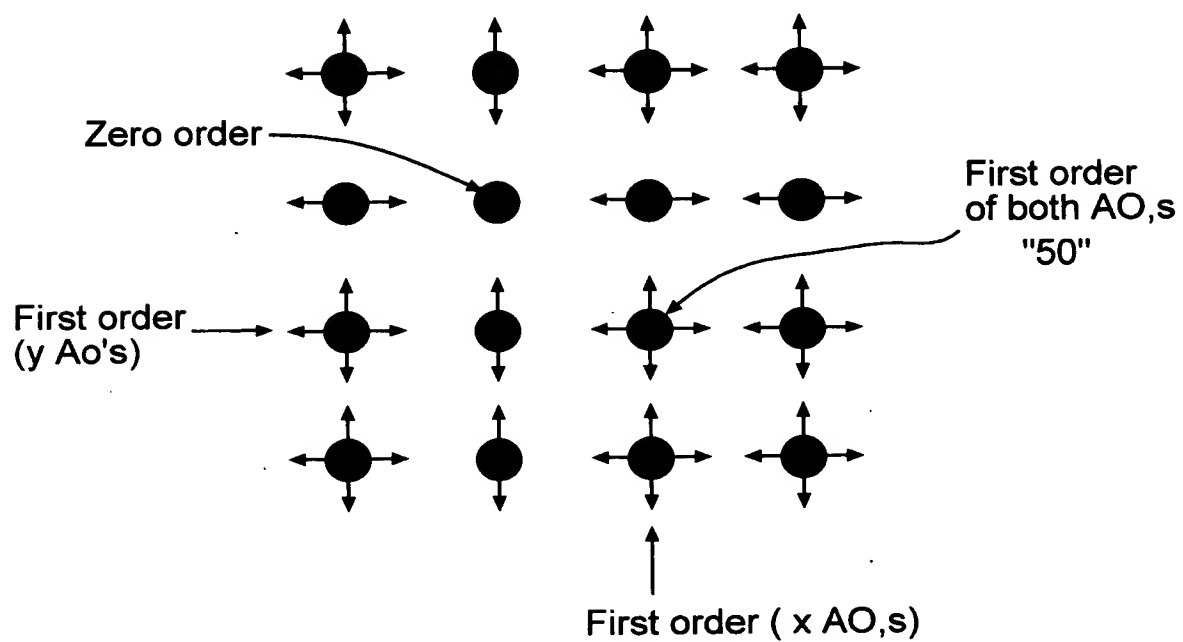


Fig. 2C

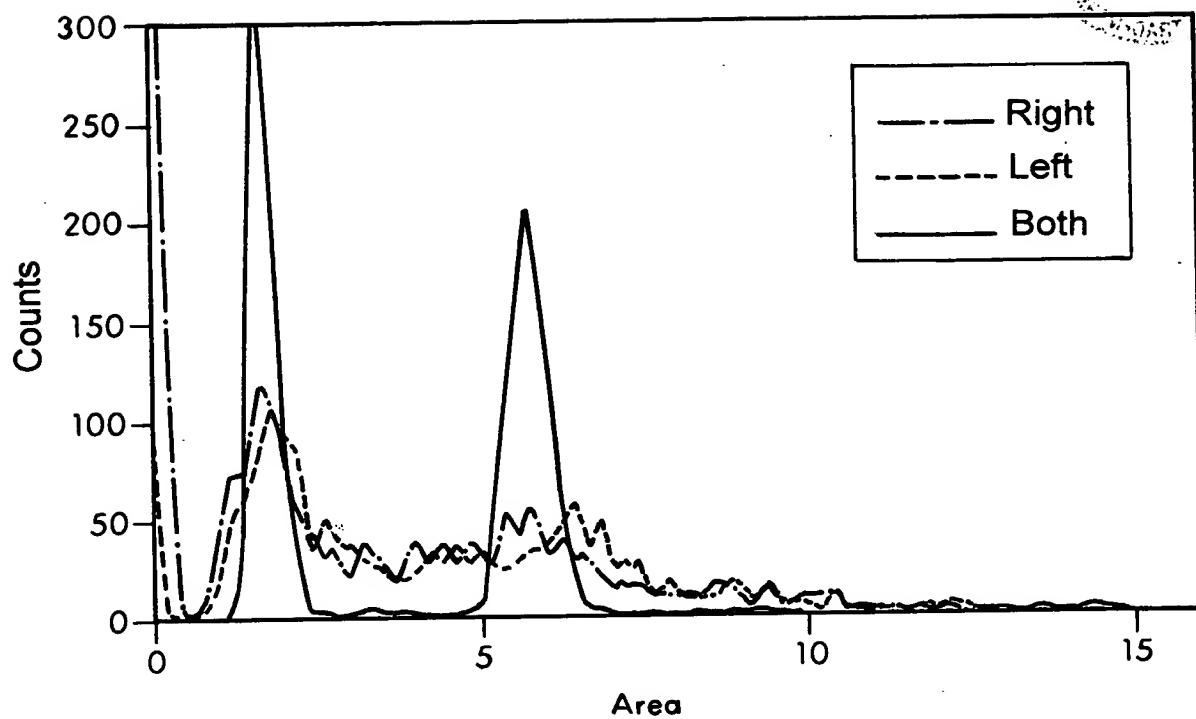


Fig. 3

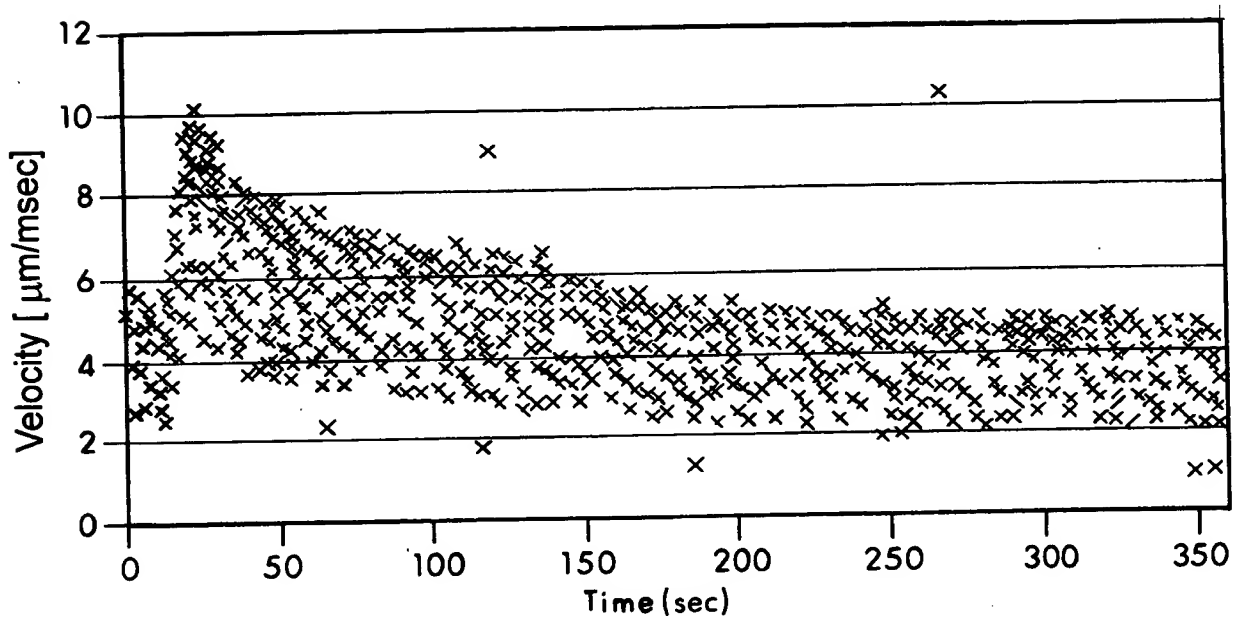


Fig. 4

20220" 85402660

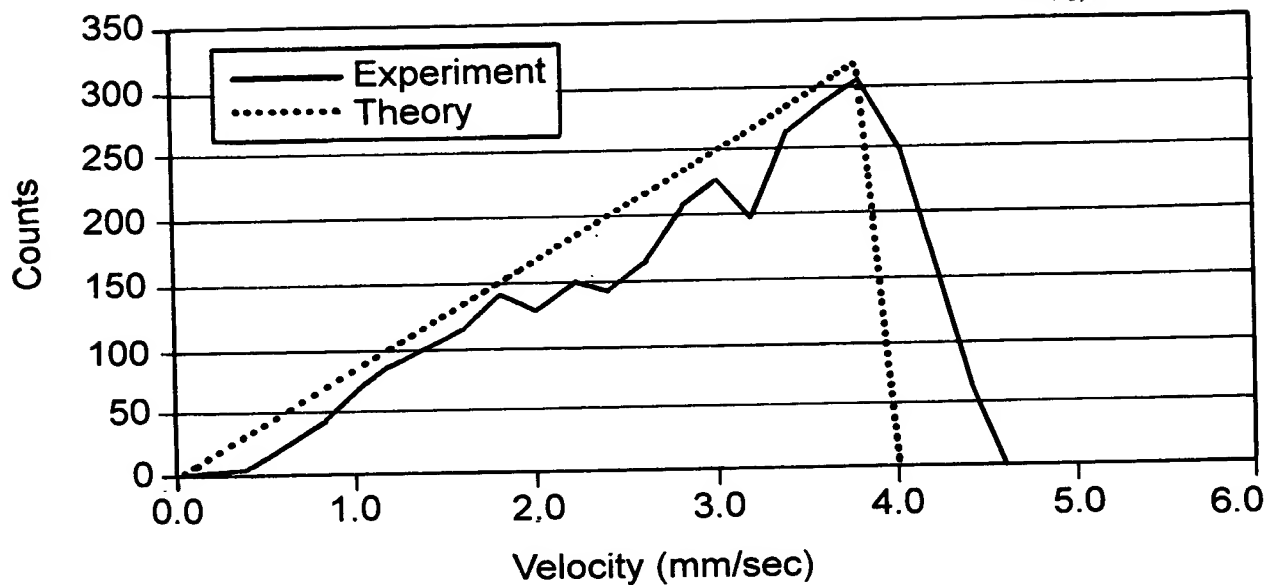


Fig. 5

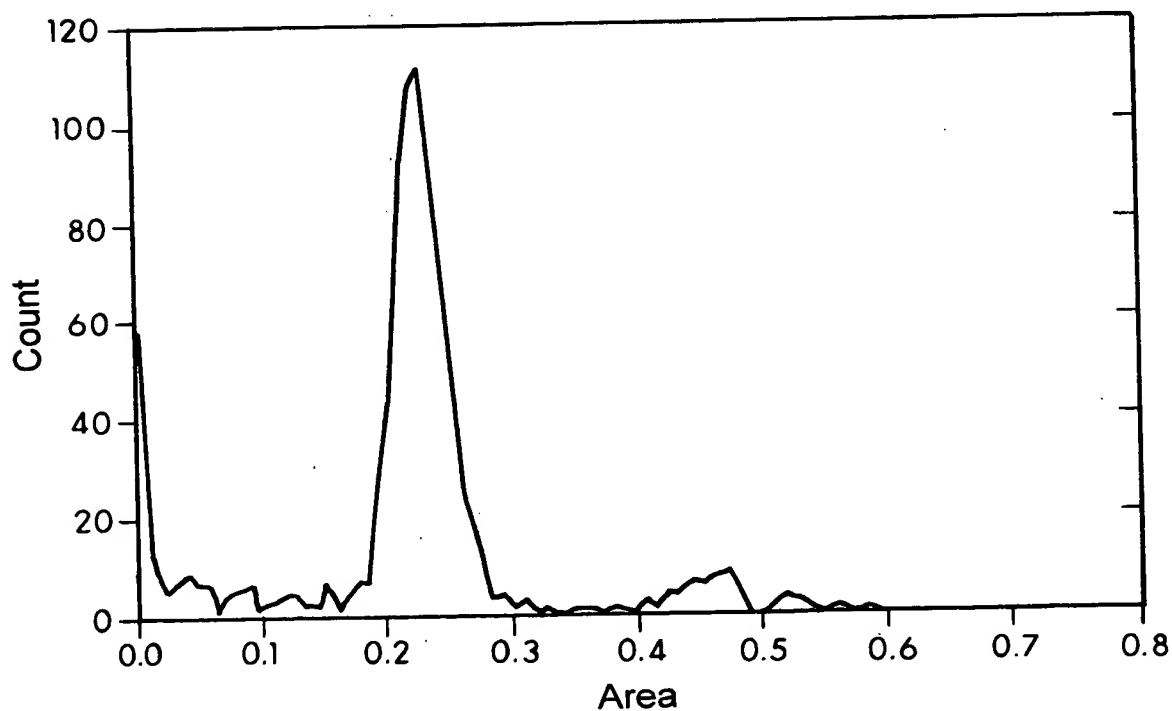


Fig. 6

ChDiv

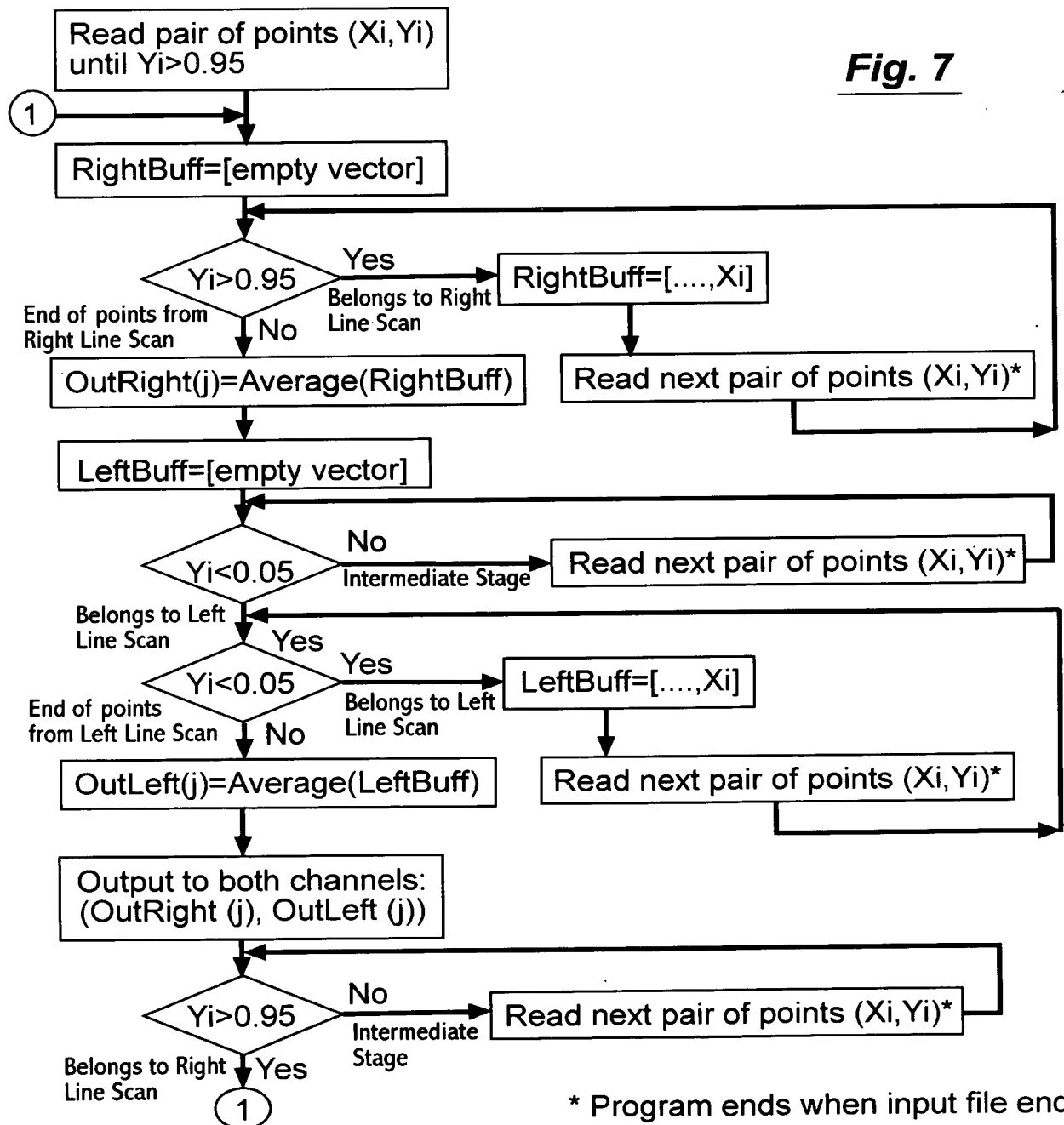
Input - two vectors: $Y(i)$ - channel 1 - square wave
- chopping signal, $0 \leq Y_i \leq 1$ $X(i)$ - channel 2 -
fluorescence raw data - from the detecting region
(both line scan)

Usually Sampled
at 40KHz

Output - two vectors: $OutRight(j)$ - fluorescence from
Right Line scan $OutLeft(j)$ - fluorescence from Left
Line scan

Usually Sampled
at 5KHz

*The sampling rate of the output channels allways equals the frequency of
the chopping signal*



ArV1Analyzer

Input: two files (one for each line scan).

Each file contain 2 vectors one of the Positions ($P(i)$) and the other has the corresponding Area ($A(i)$)

Output: three vectors - Area, TimeDiff (inversely proportional to velocity), Position

Position Parameters that can be determined - MinTimeDiff, Mas/timeDiff

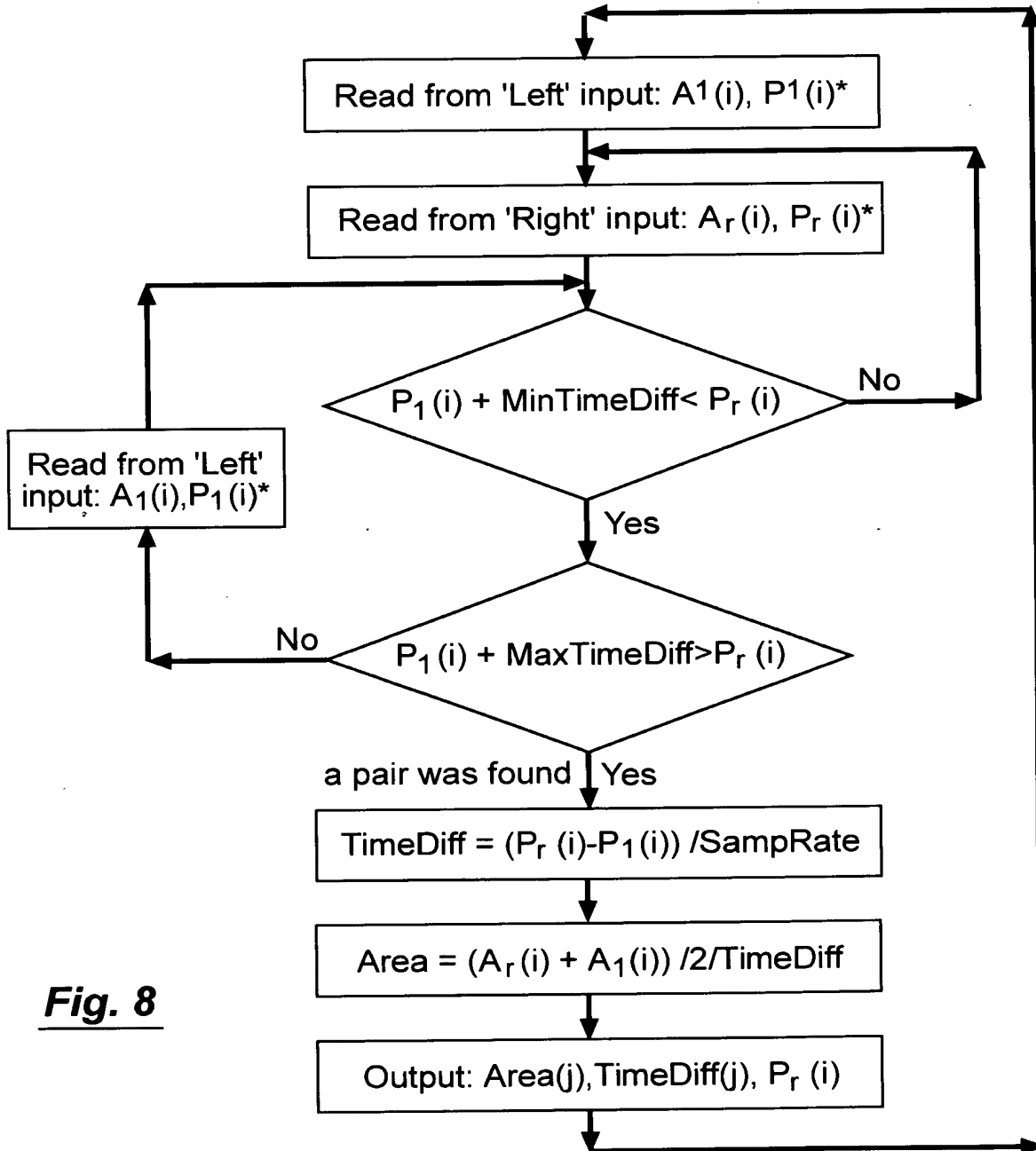


Fig. 8

Position is presented in point number and not time
TimeDiff is in Seconds and is inversely proportional to the velocity
*Program ends when one of the input files ends

09970453-032702